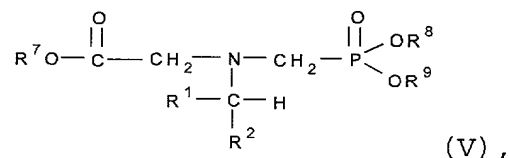


PROCESS FOR THE PREPARATION OF  
N-(PHOSPHONOMETHYL)GLYCINE BY OXIDIZING  
N-SUBSTITUTED N-(PHOSPHONOMETHYL)GLYCINES

ABSTRACT

5 This invention is directed to an improved  
process for the preparation of N-(phosphonomethyl)glycine  
(i.e., "glyphosate"), a salt of N-  
(phosphonomethyl)glycine, or an ester of N-  
(phosphonomethyl)glycine. The process comprises  
10 combining an N-substituted N-(phosphonomethyl)glycine  
reactant with oxygen in the presence of a noble metal  
catalyst. The N-substituted N-(phosphonomethyl)glycine  
reactant has formula (V):



15 wherein R<sup>1</sup> and R<sup>2</sup> are independently selected from the  
group consisting of hydrogen, halogen, -PO<sub>3</sub>R<sup>12</sup>R<sup>13</sup>, -SO<sub>3</sub>R<sup>14</sup>,  
-NO<sub>2</sub>, hydrocarbyl, and substituted hydrocarbyl other than  
-CO<sub>2</sub>R<sup>15</sup>; and R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, and R<sup>15</sup> are  
independently selected from the group consisting of  
20 hydrogen, hydrocarbyl, substituted hydrocarbyl, and an  
agronomically acceptable cation.